

Challenges Facing Soft White Gradients in Flexography Printing

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Abstract:

The Anilox Roll is known as the heart of the flexography printing process, and there is a relationship between the anilox screen ruling and the flexographic printing plate screen ruling, since there is a factor between 4:9 to obtain the right screen ruling on the flexographic printing plate.

The lesser screen ruling of the anilox roll results to obtain a low screen ruling on the flexographic printing plate and high ink density on the substrate. The higher screen ruling of the anilox roll results to obtain a high screen ruling on the flexographic printing plate and low ink density on the substrate.

So we are facing a critical challenge to obtain soft white gradient, and high density at the same time, So the researcher tried to face this challenge and present a solution for that problem

Research problem:

White Gradients in flexography are difficult to be established smoothly, due to the need of high volume anilox roll used with white ink, to carry the design colors.

Research objective:

This research aims to control the usage of anilox rolls to obtain soft white gradients with high density in solid areas at the same time.

Research Importance:

The Importance Of The Research Is extend the usage of flexographic printing as a challenger to rotogravure printing, after solving that limitation in white gradients.

Methodology

The Researcher Uses an Experimental Approach With an Analytical Trend to set the criteria of anilox and flexographic printing plate usage to print soft white gradients with high density in solid areas at the same time.

Conclusion

- White gradients are hardly to be printed using low screen ruling anilox roll.
- Digital plate making and new trends in software rips had the ability to solve white gradients quiet well with the help of choosing the right anilox rolls.

Keywords: Anilox roll – white ink – dot dipping.